

Applicants: NOVAKOVSKY, Alexander et al.  
Serial Number: 10/720,672

Assignee: Intel Corporation  
Attorney Docket: P-5667-US

### Amendments to the Drawings

The attached replacement sheets of drawings include changes to FIGS. 1 and 2.

In FIG. 1, element 101 has been amended to read "Input Data" instead of "Input Unit".

In FIG. 2, element 211 has been amended to encompass the three boxes labeled "Comb Logic"; element 221 has been amended to encompass the box labeled "Comb Loop Logic"; the broken horizontal arrow between element 211 and element 221 has been amended into a non-broken horizontal arrow; and the broken horizontal arrow between element 221 and element 231 has been amended into a non-broken horizontal arrow.

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### REMARKS

Applicants have carefully studied the Office Action. This paper is intended to be fully responsive to all points of rejection and objection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

### Status of the Claims

Claims 1-42 are pending in the Application. Claims 1, 12, 19, 30, 37 and 40 have been amended.

### Amendment of Claims

Applicants have amended claims 1, 12, 19, 30, 37 and 40 to more clearly define what the Applicants regard as the invention.

No new matter has been added by this Amendment.

### Drawings

FIG. 1 has been amended to correct an inadvertent typographical error, such that element 101 now reads "Input Data" instead of "Input Unit", to match the specification which refers to "input data 101". No new matter has been added.

The Examiner objected to the drawings and contended that in FIG. 2, the lines of elements 211 and 221 are broken and should be corrected.

Accordingly, Applicants have amended FIG. 2. Specifically, element 211 has been amended to encompass the three boxes labeled "Comb Logic"; element 221 has been amended to encompass the box labeled "Comb Loop Logic"; the broken horizontal arrow between element 211 and element 221 has been amended into a non-broken horizontal arrow; and the broken horizontal arrow between element 221 and element 231 has been amended into a non-broken horizontal arrow. No new matter has been added.

In view of the above, Applicants respectfully request that the objection to the drawings be withdrawn.

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### Claim Objections

The Examiner objected to claims 1, 19, and 37 and contended that the preamble must state the application, purpose, or intended use.

Without conceding the appropriateness of the Examiner's objection, the preamble of each of claims 1, 19 and 37 has been amended to recite, *inter alia*, "for VLSI design analysis".

In view of the above, Applicants respectfully request that the objection to claims 1, 19, and 37 be withdrawn.

The Examiner objected to claims 12 and 30 under 37 CFR §1.75(c) as being of improper dependent form for failing to further limit the subject matter of the previous claim.

Claim 12 has been amended to recite, *inter alia*, "extracting a combinational logical element".

Claim 30 has been amended to recite, *inter alia*, "to extract a combinational logical element".

Applicants respectfully submit that each of claims 12 and 30, as amended, is not of improper dependent form and meets the requirements of 37 CFR §1.75(c).

In view of the above, Applicants respectfully request that the objection to claims 12 and 30 under 37 CFR §1.75(c) as being of improper dependent form be withdrawn.

The Examiner objected to claims 2-18, claims 20-36, and claims 38-39 because they depend on objected claims 1, 19, and 37, respectively.

Since independent claims 1, 19, and 37 as amended are allowable, Applicants respectfully request that the objection to claims 2-18, 20-36, and 38-39 be withdrawn.

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### Claim Rejections Under 35 USC §102(b)

The Examiner rejected claims 1-42 under 35 USC §102(b) as being anticipated by Novakovsky et al., "High Capacity and Automatic Functional Extraction Tool for Industrial VLSI Circuit Designs" (Computer Aided Design, ICCAD 2002, IEEE/ACM International Conference on 10-14 November 2002) ("the ICCAD publication").

Applicants respectfully submit that in view of the foregoing amendment, the rejection of claims 1-42 under 35 USC §102(b) as being anticipated by the ICCAD publication should be withdrawn.

As is well established, in order for a claim to be anticipated by the prior art, each and every element and feature of the claim must be included in a single prior art document.

Each of amended independent claims 1 and 40 recites, *inter alia*, "automatically resolving the loop by performing an operation selected from a group consisting of: replacing the loop with a state element in a Finite State Machine level, and replacing the loop by a logically equivalent pure combinational non-loop logic". The ICCAD publication does not disclose, teach or suggest at least this feature of amended independent claims 1 and 40. Therefore, the ICCAD publication does not anticipate independent claims 1 and 40, as amended.

Each of amended independent claims 19 and 37 recites, *inter alia*, "automatically resolve the loop by performing an operation selected from a group consisting of: replacing the loop with a state element in a Finite State Machine level, and replacing the loop by a logically equivalent pure combinational non-loop logic". The ICCAD publication does not disclose, teach or suggest at least this feature of amended independent claims 19 and 37. Therefore, the ICCAD publication does not anticipate independent claims 19 and 37, as amended.

Applicants respectfully submit that the above-mentioned distinctions of amended independent claims 1, 19, 37 and 40 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, and any combinations of these references. Therefore, while the Examiner has not made such a rejection, Applicants respectfully submit that each of

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amended independent claims 1, 19, 37 and 40 meets the patentability requirements of 35 USC §103.

Claims 2-18, claims 20-36, claims 38-49, and claims 41-42 are dependent from amended independent claims 1, 19, 37, and 40, respectively, and include all the features of these independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 2-18, claims 20-36, claims 38-49, and claims 41-42 follow directly from the novelty and patentability of amended independent claims 1, 19, 37, and 40, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 1-42 under 35 USC §102(b) as being anticipated by the ICCAD publication be withdrawn.

#### Conclusion

In view of the foregoing amendment and remarks, and for at least the reasons discussed above, Applicants respectfully submit that claims 1-42 are deemed to be allowable. Their favorable reconsideration and allowance are respectfully requested.

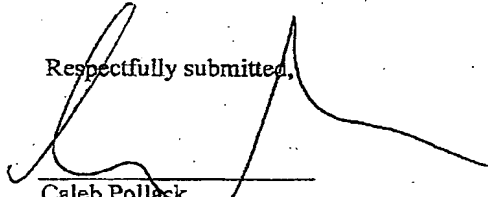
Should the Examiner have any question or comment as to the form, content or entry of this paper, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

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No fees are believed to be due in connection with this paper. However, if any fees are in fact due in connection with this paper, please charge any such fees to deposit account No. 50-3355.

Respectfully submitted,



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